Military Health System
Office of the Chief Information Officer
Integrated Requirements-Design
Overview

Data Quality Course
August 12, 2008
Deputy Director, Integrated Requirements-Design

Purpose

- **Data Quality Course attendees will gain familiarity with**:
  - The MHS Integrated Requirements-Design (IRD) Process
  - The MHS Concept of One
  - The IRD Process and Data Quality
  - The IRD Organization
  - MHS IM/IT Governance
  - MHS Related Internet Sites

Integrated Requirements-Design What Problem Are We Solving

- Improve alignment – ability to deliver information systems that
  - Support the business objectives of MHS Leadership and Stakeholders
  - Deliver the value MHS Leadership seeks from their IT investments
- Improve interoperability – the ability of MHS information systems to
  - Work together as one seamless MHS solution
  - Share information with MHS partners
- Improve agility – the ability to deliver information systems
  - More quickly
  - At a lower cost
- Alignment, interoperability and agility are characteristics that lead to improved
  - Cost
  - Schedule
  - Time to market
  - Performance
  - **Quality**

Integrated Requirements-Design
Improves Alignment, Interoperability & Agility

Governance

Alignment

Individual Projects

Direct

Fund

Monitor

MHS IM/IT Initiatives

Master Planning

IM/IT Strategic Plan

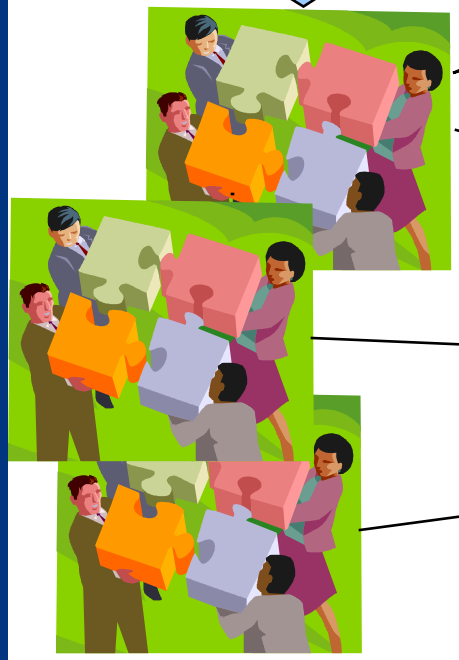
Future State Architecture

MHS Transformation Plan

Alignment

Alignment
Individual Projects Are Led By Information Managers Reporting to Governance

Interoperability and Agility
IRD Creates Minimum Essential Information to Ensure Convergence and **Quality**



Integrated Requirements-Design

Program Execution

Execute Programs According to Convergence and **Quality** Plan

MHS Vision – Concept of One
- **One MHS**
- **One MHS requirement**
- **Satisfied by one solution**

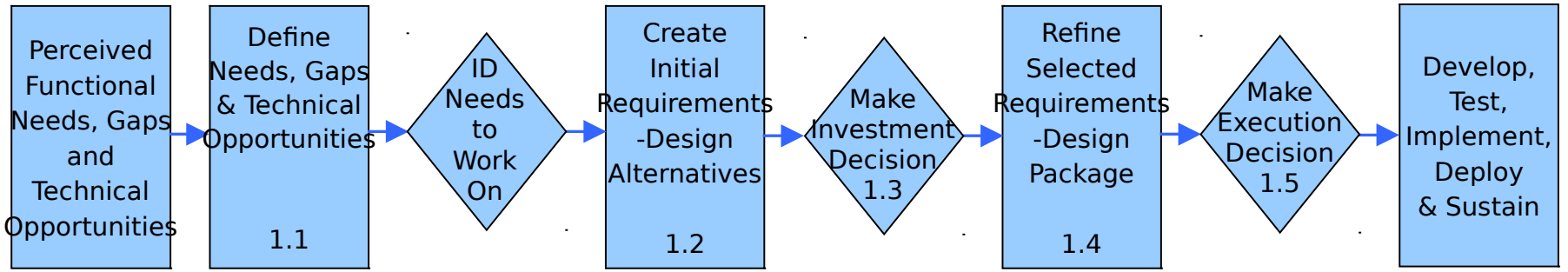
Functional

Systems

Important Concepts – Mindset Changes

- MHS concept of one - There is one MHS with one set of MHS enterprise requirements which are satisfied by one MHS enterprise solution. This solution is acquired/built as multiple components.
- Business processes and IT systems are intrinsically related
  - Requirements discussions must include people who understand the technical capabilities available to satisfy the requirements
  - Design discussions must include people who understand the business needs
- Requirement design discussions are documented using enterprise architecture methodologies
  - Developed to represent the complexities found in the MHS in an unambiguous way
  - Developed to ensure enterprise design integrity
- Government reclaims it's responsibility to determine the future of the MHS
  - Government as integrator
  - Government furnished design specifications
- Transparency - Maintain broad-based (technical and business), external and internal visibility and review throughout the process
- Reduce the size of functional/system entities that move through the lifecycle

Integrated Requirements-Design Process



Triage Phase

Receive, document, analyze and prioritize all of the perceived needs, gaps and technical opportunities throughout the MHS and decide which ones to analyze in depth for an investment decision

Pre-Investment Phase

Analyze requirements and associated design alternatives (requirements-design packages) and document MHS leadership investment decisions

Pre-Execution Phase

Complete design specifications for selected requirements-design packages and verify MHS leadership desire to move to execution (acquisition)

Execution Phase

Acquisition

Integrated Requirements-Design Process Conceptual Flow

Decision to work on a need or Investment Decision

Establish Core Team
IM Lead[1]

Create IRD Project Plan

Create/ Refine Overarching Description

Arrange For SME Participation

Review Relevant Existing Capabilities

Create Strawman Artifacts

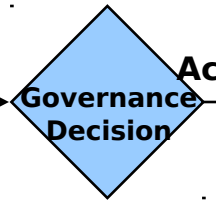
Inform Governance Decision with process results - Concept of Operations (CONOPS)[2]

- Overarching Description
- Behavioral Description
- Structural Descriptions
  - Specification
  - Implementation
  - Deployment
- Business Case
  - Recommendation
  - Cost Analysis
  - Alternatives/Options
- Shall Statements

Develop Requirements-Design Content
Information Management Lead[1]

Use best practices to accomplish this step

- DASD sponsored SME workgroups
- Pilots
- Prototyping
- Joint (SMEs and technologists) development
- Technology demonstrations
- Integrated research teams
- New approaches not thought of yet



Acquisition

Investment Decision or Execution Decision

Notes:

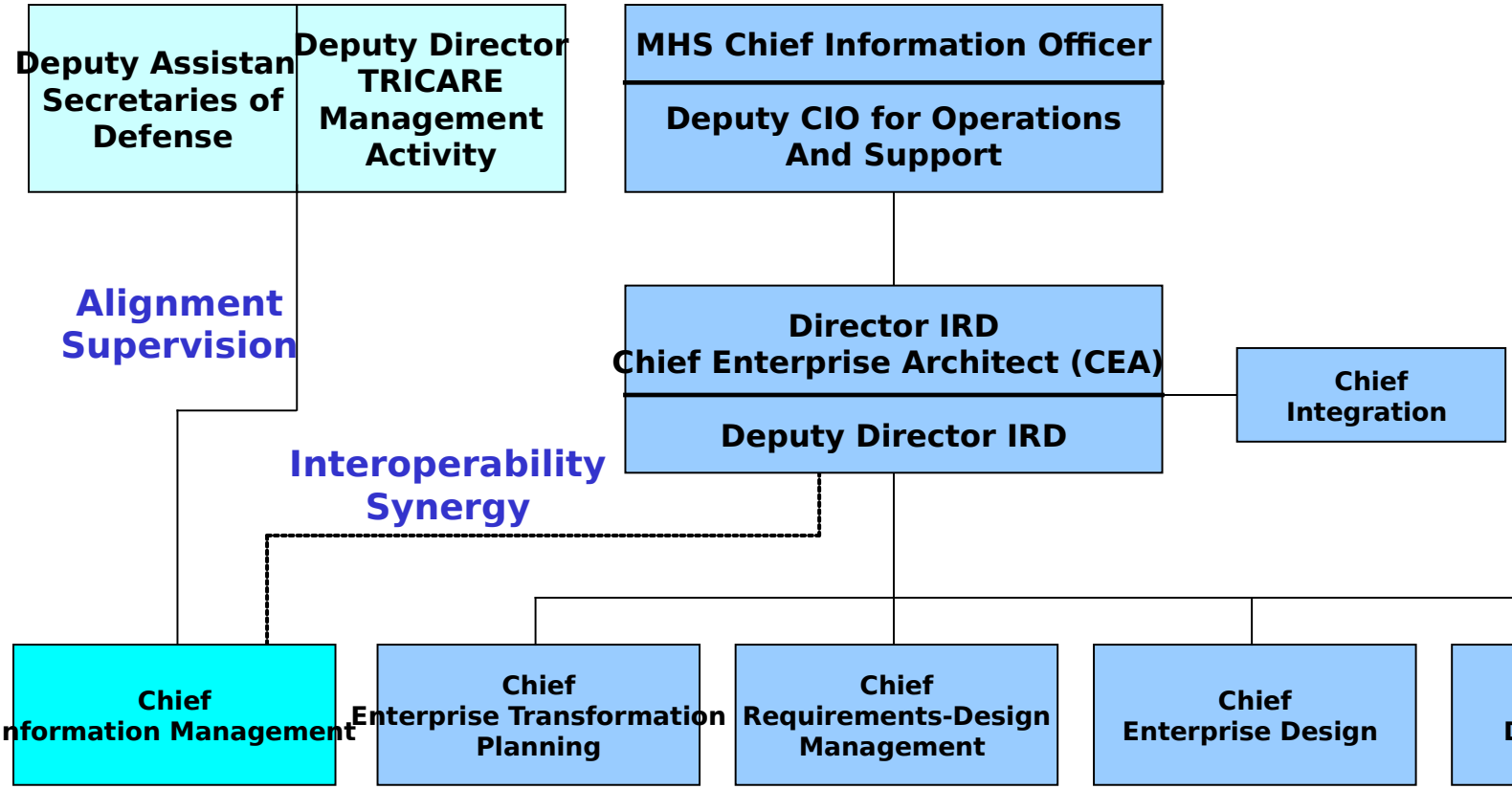
1. The IRD core teams and the process to develop the requirements-design content are lead by Information Managers who work for the MHS functional owners (DASDs, Deputy Director TRICARE & CIO)

2. The output of the IRD process is a requirements-design package or CONOPS which contains all of the information necessary to guide and constrain system development or COTS purchase

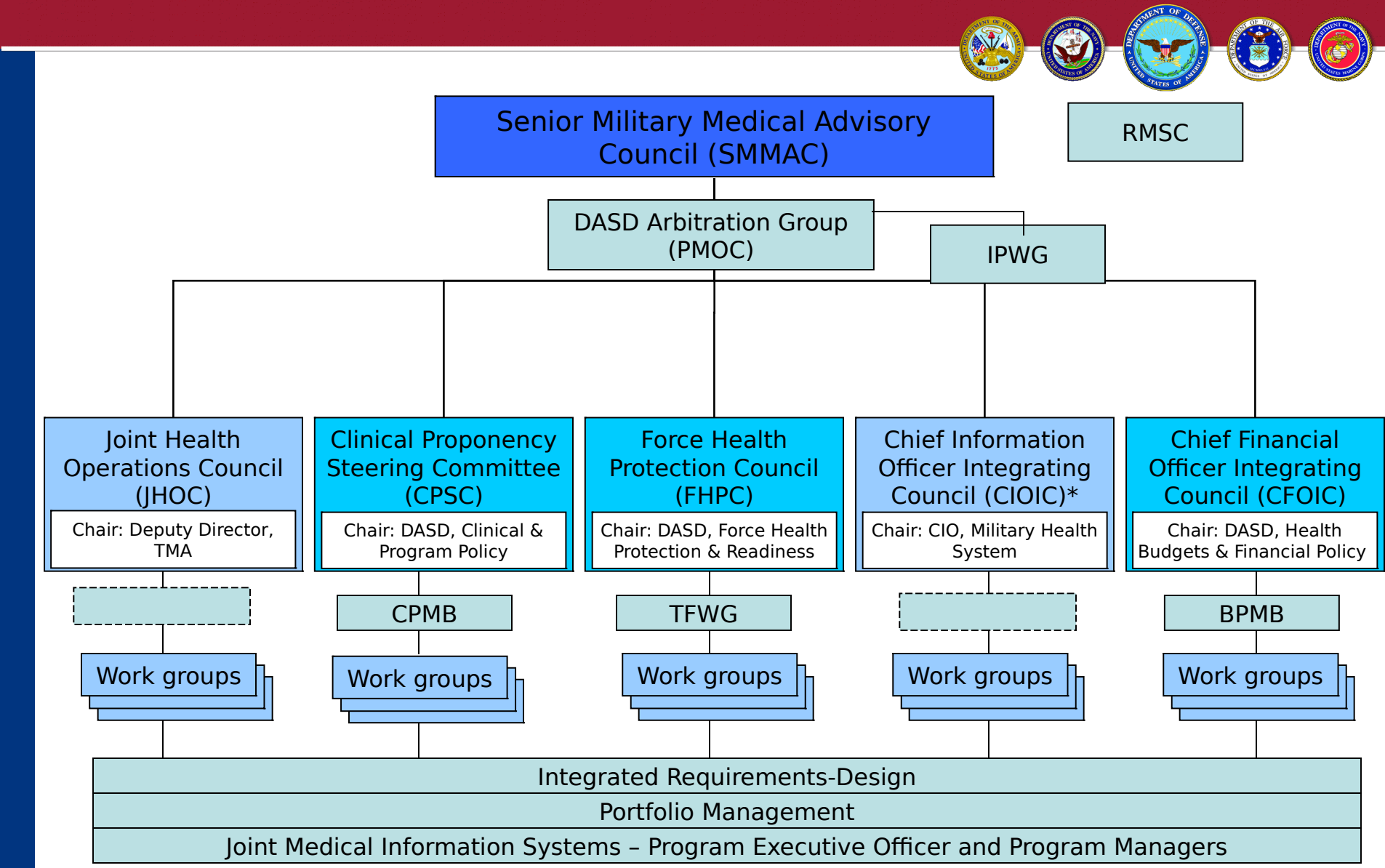
Integrated Requirements-Design Facilitates Data Quality

- **MHS Requirements-Design – identifies, and obtains agreement on specific standards and terminologies**
- **Data Standardization - at the structure, code set, input, and interchange level**
- **Data Management Plans – for all standard message transactions, data sets, code & value sets exchanged by more the one system**
- **MHS Contract Language – enforces usage of Data Standards**
- **MHS Data Standards Configuration Management Board – oversees data issues and facilitates solutions**
- **IT Data Quality IPT - EIDS**

IRD Organization



Military Health System Governance (draft)



*CIO Integrating Council would need to be established

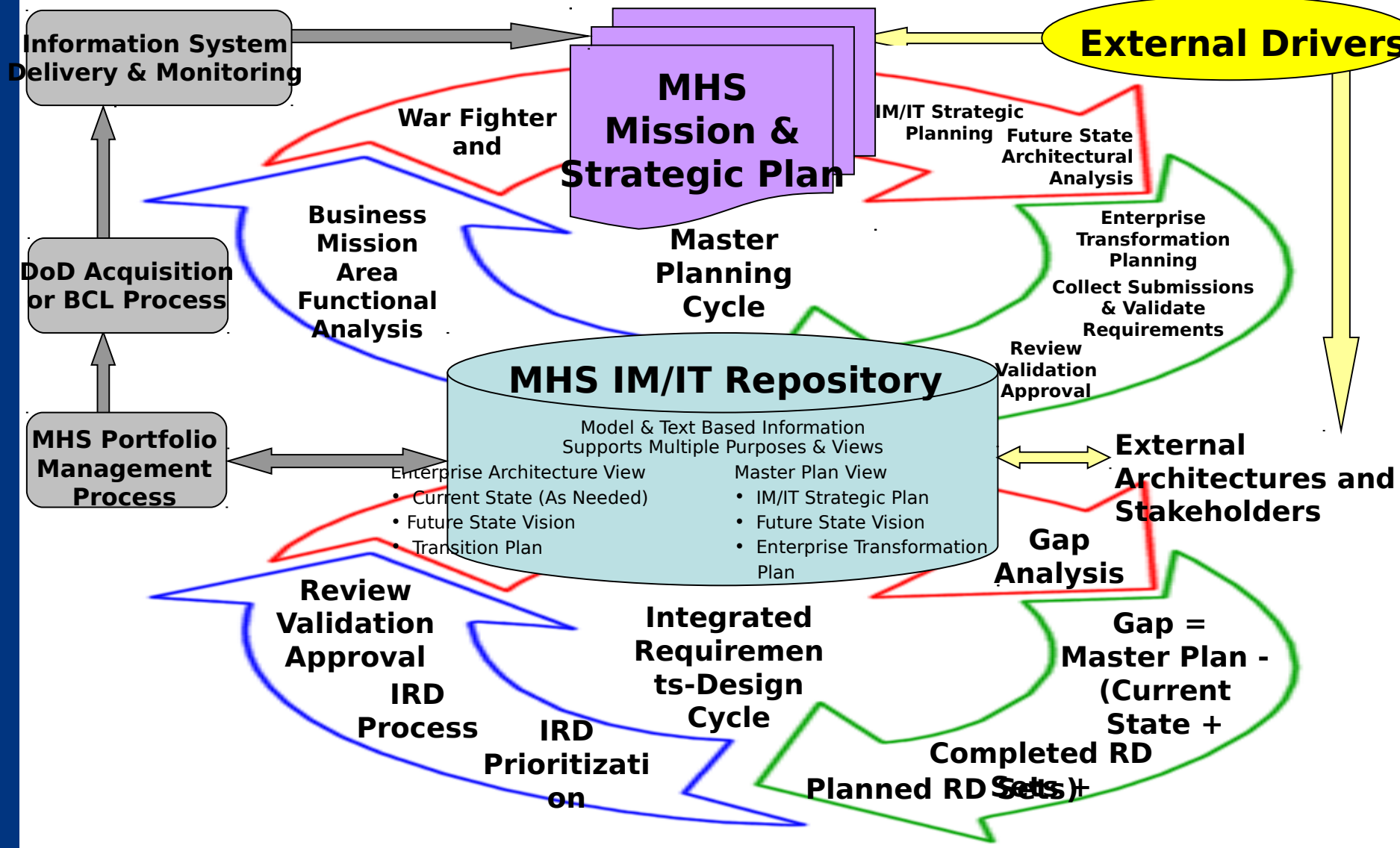
Points of Contact

- Information Managers supporting the DASD, Health Budgets & Financial Policy

- IRD Data Standards Lead
  - Chief of Integration
  - Chair of Data Standards Configuration Management Board

Related Internet Sites

- **MHS Enterprise Architecture:** Apply for password
  https://xnet.tricare.osd.mil
- **DoD Metadata Repository and Clearinghouse:**
  https://metadata.dod.mil/mdr/homepage/htm
- **Unified Biostatistical Utility (UBU):**
  http://www.tricare.mil/ocfo/bea/ubu/index.cfm
- **Uniform Business Office (UBO):**
  http://www.tricare.mil/ocfo/mcfs/ubo/index.cfm
- **DoD Business Transformation Agency:**
  http://www.defenselink.mil/dbt/
- **TRICARE Health Insurance Portability & Accountability Act (HIPAA): http://www.tricare.mil/hipaa/**

Backup?

MHS IM/IT Planning and Execution Cycle